

Reply to Office Action dated May 10, 2010

REMARKS/ARGUMENTS

Favorable reconsideration and allowance of the present application is respectfully requested. Claims 1, 3-17 and 19-24 are pending in the above application. By the above amendment, claims 2 and 18 have been cancelled without prejudice, and claims 19-24 have been added.

The Office Action dated May 10, 2010, has been received and carefully reviewed. In that Office Action, claims 1-8, 10-12 and 14-18 were rejected under 35 U.S.C. 102(b) as being anticipated by Ichishi, claim 9 was rejected under 35 U.S.C. 103(a) as being unpatentable over Ichishi in view of Nishino, and claim 13 was rejected under 35 U.S.C. 103(a) as being unpatentable over Ichishi in view of O'Connor. It is believed that all pending claims are allowable over the art of record, and reconsideration and allowance of the claims is respectfully requested in view of the above amendments and the following remarks.

REJECTIONS UNDER 35 U.S.C. 102(b)

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ichishi. Claim 1 as amended recites a method for adjusting an air vent for air-conditioning a motor vehicle, the air vent having assigned to it an actuator for controlling a fan device and/or an actuator for controlling air jet divergence and/or an actuator for the air direction control means and/or a heating device. At least one sensor is provided for recording measured values, and the settings of the air vent are adjusted as a function of the measured values. The actuator for controlling air jet divergence maintains a spot jet outflow from the air vent while a first measured value of the sensor is within a

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first range and maintains a diffuse outflow from the air vent while the first measured value is within a second range. Support for this amendment can be found, for example, in the paragraph beginning at page 12, line 1 and in Figure 8.

Related limitations were found in claim 2, and in rejecting claim 2, the examiner referred to column 19 and Figures 23 and 24 of Ichishi. Ichishi discloses a spot mode of operation. However, when Ichishi is not in a spot mode Ichishi operates in a "swinging" mode in which vent louvers swing back and forth. In the embodiment described in column 19, the louvers oscillate in and out rather than back and forth. However, Ichishi does not teach maintaining a spot jet outflow while a first measured value is within a first range and maintaining a diffuse outflow while the value is within a second range as recited in claim 1. Claim 1 as amended is submitted to be allowable over the art of record for at least this reason.

Claims 3-12, 14, 15 and 19 depend from claim 1 and are submitted to be allowable for at least the same reasons as claim 1.

Claim 16 has been rewritten in independent form, but the scope of this claim has not changed. Claim 16 recites, in addition to the limitations of claim 1, that manual readjustments are stored and taken into account when determining the optimum setting parameters for the air vent. The Office Action indicates that Ichishi's vents can be manually adjusted, and to this end, Ichishi provides a clutch mechanism so that these adjustments do not adversely affect the motors moving the air vents. However, nothing in Ichishi suggests that the manual readjustments are stored or are taken into account when determining optimum settings for the air vent. Claim 16 as amended is submitted to be allowable over Ichishi for at least this reason.

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If the rejection of claim 16 is maintained, it is respectfully requested that the examiner explain where Ichishi shows storing or using information regarding manual adjustments of air vents for any purpose so that the basis for this rejection can be better understood.

Claim 17 recites, inter alia, an air-conditioning or heating system having at least one air-conditioning controller and one or more air vents and at least one sensor for recording measured values. The controller is configured to automatically adjust the air vent(s) as a function of measured values and setting values, and the function is adaptive. As discussed above in connection with claim 16, Ichishi does not show or suggest adaptive functions. For example, it does not appear that Ichishi controls air vents any differently after a manual adjustment of the air vent than before. Instead, it appears that Ichishi always responds to the same conditions in the same manner. Claim 17 as amended is submitted to be allowable over Ichishi for at least this reason.

REJECTIONS UNDER 35 U.S.C. 103(a)

Claim 9 was rejected under 35 U.S.C. 103(a) as being unpatentable over Ichishi in view of Nishino. Claim 9 depends from claim 1. Nishino does not address the shortcomings of Ichishi discussed above in connection with claim 1. Claim 9 is therefore submitted to be allowable for at least the same reasons as claim 1.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ichishi in view of O'Connor. Claim 13 as amended recites, inter alia, a method for adjusting an air vent for air-conditioning a motor vehicle wherein a sensor detects a status of one or more windows and/or of a sunroof and/or of a soft top, and wherein the air vent is

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adjusted based on the status detected by the sensor. Ichishi does not show or suggest adjusting an air vent based on a detected status of a window, etc. O'Connor suggests controlling windows to open when an air conditioning unit is first turned on to allow hot air to exit a vehicle and then closing the windows. However, O'Connor does not adjust an air vent based on a detected status of a window. Therefore, the most that would be suggested by combining Ichishi with O'Connor would be to make Ichishi's windows open when an air conditioning unit is turned on. This is not the invention of claim 13, and claim 13 as amended is submitted to be allowable over the art of record for at least this reason.

NEW CLAIMS

New claim 19 depends from claim 1 and is submitted to be allowable for at least the same reasons as claim 1. Claim 19 further recites detecting an alertness of an occupant and controlling a spot jet outflow from the air vent in response to a detection of diminished alertness. Support for this claim can be found, for example, in the paragraph beginning at page 12, line 19. The art of record does not suggest controlling a spot jet outflow from a vent in response to a detection of diminished alertness, and claim 19 is submitted to be allowable for at least this reason.

New claim 20 recites a method for adjusting an air vent for air-conditioning a motor vehicle that includes providing an actuator for controlling air jet divergence from the air vent between a spot jet divergence and a diffuse divergence, measuring at least one value related to at least one condition inside the motor vehicle with a sensor, and controlling the actuator to maintain a spot jet divergence while the value is within a first

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range and controlling the actuator to maintain a diffuse divergence while the value is within a second range. As discussed above in connection with amended claim 1, the art of record does not show or suggest maintaining a spot jet divergence while a detected value is within a first range and maintaining a diffuse divergence while the value is within a second range. Claim 20 is submitted to be allowable over the art of record for at least this reason.

Claims 21-24 depend from claim 20 and are submitted to be allowable for at least the same reasons as claim 20.


CONCLUSION

Each issue raised in the Office Action dated May 10, 2010, has been addressed, and it is believed that claims 1, 3-17 and 19-24 are in condition for allowance. Wherefore, reconsideration and allowance of these claims is earnestly solicited. If the examiner believes that any additional changes would place the application in better condition for allowance, the examiner is invited to contact the undersigned attorney at the telephone number listed below.

Deposit Account Authorization

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 50-3828 and please credit any excess fees to such deposit account.

Respectfully submitted,



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